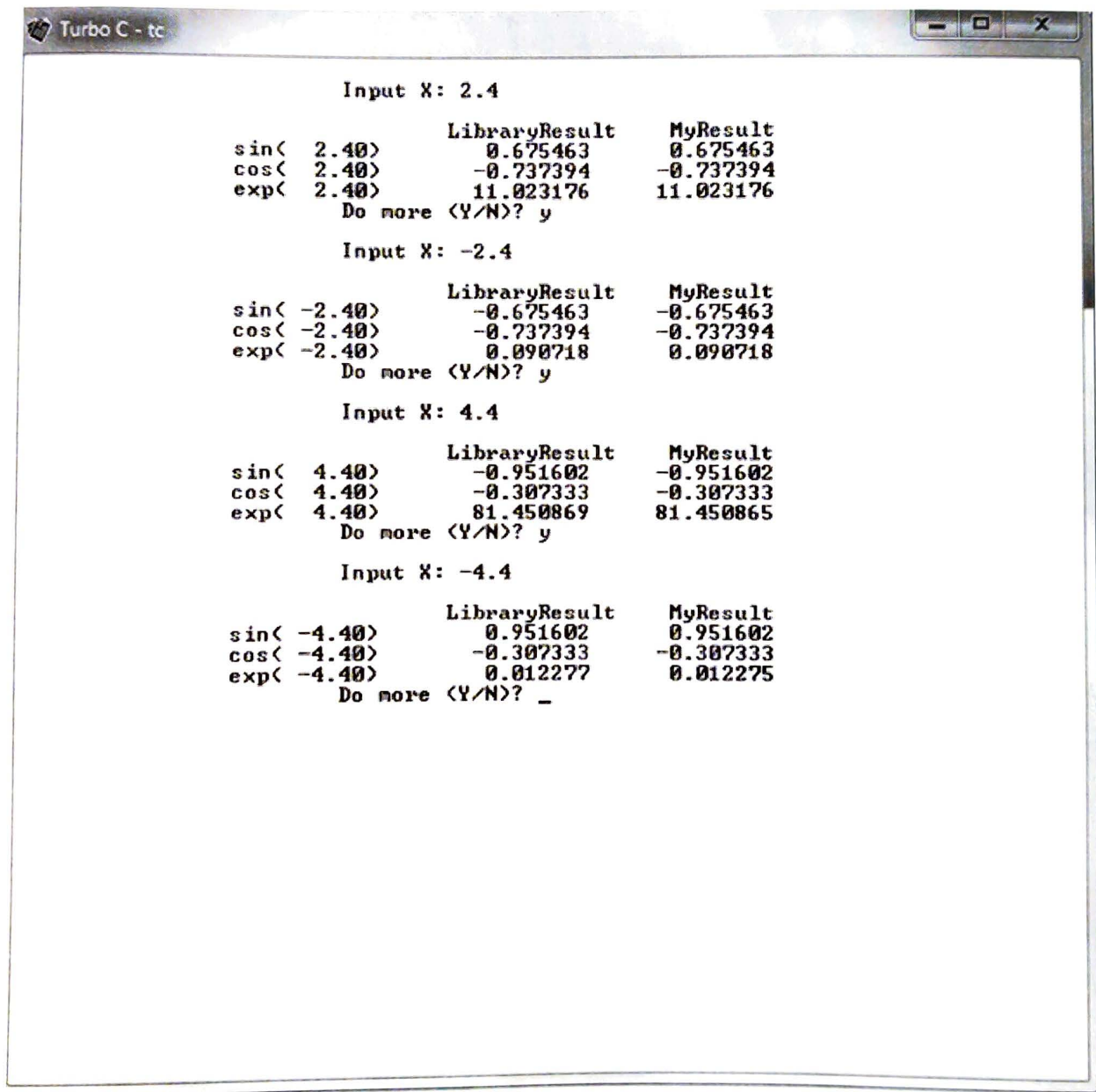


## Lab – 4

Compare library result  $\sin(x)$ ,  $\cos(x)$ , and  $\exp(x)$  with your calculation for them. Your output should be looks like the following. You can **NOT** use **power(x, n)** and **fact(n)** functions to implement your sine, cosine, or exponential functions. You have to combine these two functions into one function, it means you have to do division before doing multiplication for each item.



```
Turbo C - tc

Input X: 2.4

sin( 2.40)      LibraryResult      MyResult
cos( 2.40)      -0.675463          0.675463
exp( 2.40)      -0.737394          -0.737394
                11.023176          11.023176
Do more (Y/N)? y

Input X: -2.4

sin( -2.40)     LibraryResult      MyResult
cos( -2.40)     -0.675463          -0.675463
exp( -2.40)     -0.737394          -0.737394
                0.090718           0.090718
Do more (Y/N)? y

Input X: 4.4

sin( 4.40)      LibraryResult      MyResult
cos( 4.40)      -0.951602          -0.951602
exp( 4.40)      -0.307333          -0.307333
                81.450869          81.450865
Do more (Y/N)? y

Input X: -4.4

sin( -4.40)     LibraryResult      MyResult
cos( -4.40)     0.951602           0.951602
exp( -4.40)     -0.307333          -0.307333
                0.012277           0.012275
Do more (Y/N)? _
```